

CLAIMS

What is claimed is:

1. A method for detecting corrupt software code, said method comprising:  
defining a correlation rule for a program, said program comprising at least one  
segment, each segment comprising a plurality of executable codes, said at least  
one segment comprising a plurality of markers, said correlation rule defining a  
relationship between two or more of said markers;  
writing said program to a memory device;  
reading two or more of said markers from said memory device;  
determining whether one of said at least one segment is corrupt by applying said  
correlation rule to said two or more markers read from said device; and  
indicating whether one of said at least one segment is corrupt based upon said  
determining.
2. The method of claim 1 wherein said correlation rule comprises comparing the content  
of a first memory location with the content of a second memory location.
3. The method of claim 2 wherein  
said first memory location comprises the first memory location of a segment; and  
said second memory location comprises the last memory location of said segment.
4. The method of claim 2 wherein  
said first memory location comprises a memory location of a first segment; and

said second memory location comprises a memory location of a second segment.

5. The method of claim 2 wherein said indicating comprises indicating said one of said at least one segment is corrupt when the content of said first memory location does not equal the complement of the content of said second memory location.
6. The method of claim 1 wherein said writing comprises writing a later version of said program having a plurality of markers with values different than an earlier version of said program.
7. A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method for detecting corrupt software code, the method comprising:
  - defining a correlation rule for a program, said program comprising at least one segment, each segment comprising a plurality of executable codes, said at least one segment comprising a plurality of markers, said correlation rule defining a relationship between two or more of said markers;
  - writing said program to a memory device;
  - reading two or more of said markers from said memory device;
  - determining whether one of said at least one segment is corrupt by applying said correlation rule to said two or more markers read from said device; and
  - indicating whether one of said at least one segment is corrupt based upon said determining.

8. The program storage device of claim 7 wherein said correlation rule comprises comparing the content of a first memory location with the content of a second memory location.
9. The program storage device of claim 8 wherein said first memory location comprises the first memory location of a segment; and said second memory location comprises the last memory location of said segment.
10. The program storage device of claim 8 wherein said first memory location comprises a memory location of a first segment; and said second memory location comprises a memory location of a second segment.
11. The program storage device of claim 8 wherein said indicating comprises indicating said one of said at least one segment is corrupt when the content of said first memory location does not equal the complement of the content of said second memory location.
12. The program storage device of claim 7 wherein said writing comprises writing a later version of said program having a plurality of markers with values different than an earlier version of said program.
13. An apparatus for detecting corrupt software code, the apparatus comprising:  
means for defining a correlation rule for a program, said program comprising at least one segment, each segment comprising a plurality of executable codes, said at

least one segment comprising a plurality of markers, said correlation rule  
defining a relationship between two or more of said markers;  
means for writing said program to a memory device;  
means for reading two or more of said markers from said memory device;  
means for determining whether one of said at least one segment is corrupt by  
applying said correlation rule to said two or more markers read from said device;  
and  
means for indicating whether one of said at least one segment is corrupt based upon  
said determining.

14. The apparatus of claim 13 wherein said correlation rule comprises means for  
comparing the content of a first memory location with the content of a second  
memory location.
15. The apparatus of claim 14 wherein  
said first memory location comprises the first memory location of a segment; and  
said second memory location comprises the last memory location of said segment.
16. The apparatus of claim 14 wherein  
said first memory location comprises a memory location of a first segment; and  
said second memory location comprises a memory location of a second segment.
17. The apparatus of claim 14 wherein said means for indicating comprises means for  
indicating said one of said at least one segment is corrupt when the content of said

first memory location does not equal the complement of the content of said second memory location.

18. The apparatus of claim 13 wherein said means for writing comprises means for writing a later version of said program having a plurality of markers with values different than an earlier version of said program.

19. An apparatus for detecting corrupt software code, said apparatus comprising:  
a memory comprising a first code space, a first data space, a second code space and a second data space, each of said spaces comprising at least one segment; and  
a processor configured to execute instructions in a program, said program comprising at least one segment, each segment comprising a plurality of executable codes, said at least one segment comprising a plurality of markers, said plurality of markers including interrelationships defined by a correlation rule, said processor further configured to read two or more of said markers from said memory device and to apply said correlation rule to said two or more markers read from said device, said apparatus further configured to indicate whether one of said at least one segment is corrupt based upon said applying.

20. The apparatus of claim 19 wherein said correlation rule defines a relationship between the content of a first memory location and the content of a second memory location.

21. The apparatus of claim 20 wherein

said first memory location comprises the first memory location of a segment; and  
said second memory location comprises the last memory location of said segment.

22. The apparatus of claim 20 wherein

said first memory location comprises a memory location of a first segment; and  
said second memory location comprises a memory location of a second segment.

23. The apparatus of claim 20 wherein said processor is further configured to indicate

said one of said at least one segment is corrupt when the content of said first memory  
location does not equal the complement of the content of said second memory  
location.

24. The apparatus of claim 19 wherein said processor is further configured to write a later

version of said program having a plurality of markers with values different than an  
earlier version of said program.

25. A method for detecting corrupt software code, said method comprising:

defining a correlation rule for a program comprising a plurality of executable codes,

said program further comprising a plurality of markers, said correlation rule

defining a relationship between two or more of said markers;

writing said program to a memory;

reading two or more of said markers from said memory; and

[illegible]